Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of charging two or more rechargeable batteries from a single current source by use of two or more separate charging ports, the batteries being coupled to different respective charging ports, the method comprising:

determining a charging current to be allocated to each charging port at least in part on an average current drain during usage of the rechargeable battery coupled to the respective charging port; and

allocating charging currents from ~~a~~ the single current source to the two or more separate charging ports ~~having two or more rechargeable batteries coupled respectively thereto~~ so that said two or more rechargeable batteries will be fully charged at substantially the same time.

2. (original) The method of claim 1, further comprising:

determining relative amounts of charge required to fully charge said two or more rechargeable batteries.

3. (cancelled)

4. (original) A charger comprising:

a single current source;

two or more separate charging ports;

a current allocator to allocate charging currents from said single current source to said two or more ports; and

a controller to determine said charging currents so that two or more rechargeable batteries coupled respectively to said two or more ports will be fully charged at substantially the same time.

5. (currently amended) The charger of claim 4, further comprising:

a measurement unit to measure voltage differences at said two or more ports; and

one or more lookup tables,

wherein said controller is to determine from said one or more lookup tables an amount of charge required to fully charge ~~a~~ each battery based on said measured voltage differences, a battery type of the respective battery, and an average current drain of ~~said~~ each battery during usage.

6. (original) The charger of claim 4, wherein a particular one of said rechargeable batteries is inside a battery-operated device and said controller is to receive a voltage of said particular rechargeable battery from said battery-operated device, the charger further comprising:

one or more lookup tables,

wherein said controller is to determine from said one or more lookup tables an amount of charge required to fully charge said particular battery based on said received voltage, a battery type, and an average current drain of said particular battery during usage.

7. (new) The charger of claim 4, further comprising a measurement unit to measure voltage differences at said two or more ports for use in determining said charging currents.

8. (new) The charger of claim 4, further comprising one or more lookup tables and wherein the controller is configured to determine from the one or more lookup tables an amount of charge required to fully charge each battery based on measured voltage differences at the two or more ports, a battery type of the respective battery and an average current drain of each battery during usage.

9 (new) The charger of claim 4, wherein a particular one of the rechargeable batteries is, in use of the charger, inside a battery-operated device and the controller is configured to receive a voltage of the particular rechargeable battery

from the battery-operated device for use in determining an amount of charge required to fully charge the particular battery.

10. (new) A method of charging two or more rechargeable batteries from a single current source by use of two or more separate charging ports, the batteries being coupled to different respective charging ports, the method comprising:

determining relative amounts of charge required to fully charge said two or more rechargeable batteries; and

allocating charging currents from the single current source to the two or more separate charging ports so that said two or more rechargeable batteries will be fully charged at substantially the same time.

11. (new) The method of claim 10, wherein the steps of determining and allocating are repeated during charging of the batteries.

12. (new) The method of claim 10, wherein the charging currents are allocated in proportion to the determined amounts of charge.

13. (new) The method of claim 10, further comprising:

determining the charging current to be allocated to each charging port at least in part on an average current drain during usage of the rechargeable battery coupled to the respective charging port.

14. (new) The method of claim 1, wherein the batteries are for a mobile electronic device.

15. (new) The charger of claim 4, wherein the batteries are for a mobile electronic device.

16. (new) The method of claim 10, wherein the batteries are for a mobile electronic device.